

REMARKS

The Official Action mailed February 15, 2006, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on June 14, 2004; December 27, 2005; and January 18, 2006. A further Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.

Claims 1-19 were pending in the present application prior to the above amendment. Claims 1 and 2 have been amended to better recite the features of the present invention, and new dependent claims 20 and 21 have been added to recite additional protection to which the Applicant is entitled. Accordingly, claims 1-21 are now pending in the present application, of which claims 1-10 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 2 of the Official Action rejects claims 1-19 as obvious based on the combination of U.S. Patent No. 4,766,471 to Ovshinsky and U.S. Patent No. 4,888,625 to Mueller. With respect to independent claims 1 and 2, the Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended. With respect to independent claims 3-10, the Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

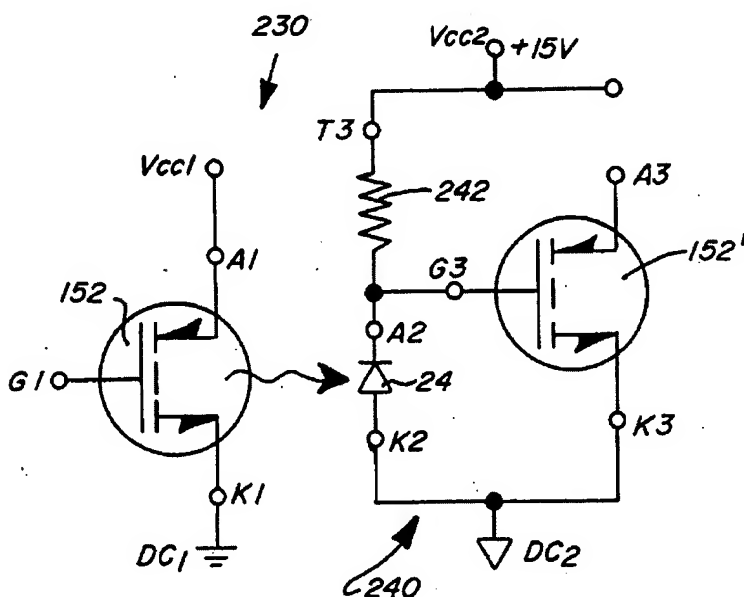
As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the

prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Independent claims 1 and 2 have been amended to recite a light receiving element electrically connected to another one of the stacked semiconductor elements. Independent claims 3-6 already recite this feature. Also, claims 7 and 8 already recite a light receiving element electrically connected to another one of the plurality of semiconductor elements. Independent claims 9 and 10 already recite a light receiving element electrically connected to another one of the stacked thin film integrated circuits. For the reasons provided below, Ovshinsky and Mueller, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

Ovshinsky does not teach or suggest a light receiving element electrically connected to another one of stacked semiconductor elements, another one of a plurality of semiconductor elements or another one of stacked thin film integrated circuits. The Official Action asserts that "DIFETs 232, 234" of Ovshinsky correspond with the "stacked thin film semiconductor circuits each having a thin film transistor" (page 2, Paper No. 060207). Although the Official Action refers to "DIFETs 232, 234," reference characters 232 and 234 appear to refer generally to device 232 and upper device plane

234. In any event, Ovshinsky appears to disclose a DIFET (Double Injection Field Effect Transistor) 152, which is a light-emitting transistor (see column 6, lines 24-29, column 19, lines 16-19, and Figure 6B, reproduced below).



However, the Applicant respectfully submits that it is improper to rely on DIFET 152 to teach both a light emitting element and a semiconductor element. In other words, while the Examiner might, hypothetically, assert that the DIFET 152 of Ovshinsky corresponds with either a light emitting element or a semiconductor element, Ovshinsky does not teach or suggest both a light emitting element and a semiconductor element in the context of the present claims.

Also, the independent claims recite stacked semiconductor elements each having at least one thin film transistor. Although Ovshinsky appears to disclose a Field Effect Transistor in Figures 6A and 6B, the Applicant respectfully submits that the Field Effect Transistor does not correspond to the claimed thin film transistor.

Therefore, Ovshinsky does not teach or suggest a light receiving element electrically connected to another one of stacked semiconductor elements, another one

of a plurality of semiconductor elements or another one of stacked thin film integrated circuits.


Mueller does not cure the deficiencies in Ovshinsky. Mueller is relied upon to allegedly teach a resin. However, Ovshinsky and Mueller, either alone or in combination, do not teach or suggest a light receiving element electrically connected to another one of stacked semiconductor elements, another one of a plurality of semiconductor elements or another one of stacked thin film integrated circuits.

Since Ovshinsky and Mueller do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New dependent claims 20 and 21 have been added to recite additional protection to which the Applicant is entitled. For the reasons stated above and already of record, the Applicant respectfully submits that new claims 20 and 21 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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